

Claims

- 1- SAS Service Architecture having a layered structure including a set of software modules, at least: ASTP Dispatcher, SCCP Transcoder for TCAP User, TCAP, at least one TCAP User Service Distributor, at least two TCAP User Services, wherein at least two different types of interactions can be configured: interaction Type A between ASTP Dispatcher and TCAP User Service, wherein the message to be processed is forwarded from the ASTP Dispatcher to the relevant TCAP User Service via SCCP Transcoder for TCAP User, TCAP, and the relevant TCAP User Service Distributor, and interaction Type B1 between two TCAP User Services assigned to the same TCAP User Service Distributor, wherein the TCAP User Service Distributor forwards the message to be processed to a second TCAP User Service dependent on the result of the outbound message of a first TCAP User Service.
2. SAS Service Architecture, as set forth in claim 1, wherein a further type of interaction can be configured: interaction Type C between two TCAP User Services assigned to different TCAP User Service Distributors, wherein TCAP forwards the message to be processed to a second TCAP User Service assigned to a second TCAP User Service Distributor dependent on the result of the outbound message of a first TCAP User Service assigned to a first TCAP User Service Distributor.
3. SAS Service Architecture, as set forth in claim 1, wherein the SAS Service Architecture further includes the software modules SCCP Transcoder, at least one SCCP Service Distributor, at least two SCCP Services, and wherein two further types of interaction can be configured: interaction Type D between a TCAP User Service and a SCCP User Service, wherein ASTP Dispatcher forwards the message to be processed to a TCAP User Service assigned to a TCAP User Service Distributor dependent on the result of the outbound message of a SCCP User Service assigned to a SCCP User Service Distributor, and interaction Type B2 between two SCCP User Services assigned to the same SCCP User Service

Distributor, wherein the SCCP User Service Distributor forwards the message to be processed to a second SCCP User Service dependent on the result of the outbound message of a first SCCP User Service.

4. SAS Service Architecture, as set forth in claim 1, wherein the SAS Service Architecture further includes a common database pool to which all SAS Application Services have access.

5. Method to perform an analysis for a SAS application service, comprising the steps of:

performing an inbound message analysis,

performing a Service Decision,

performing an Outbound Message Synthesis using at least one Outbound Configuration Table.

6. Method, as set forth in claim 5, wherein the Service Decision further includes a Generic Loop Detection Analysis using a Loop Detection Configuration Table.

7. Method, as set forth in claim 5, wherein the Service Decision further includes a Database Search in a common database pool, which includes at least a Single Number Configuration Table and a Range Number Configuration Table.

8. Signaling application server, comprising at least one processor, at least one database and at least one processing software for processing at least one application service request, wherein the at least one processing software includes a signaling connection control part process and at least one transaction capabilities application part process to identify at least one application service request, and wherein processing a SAS application service, comprises the steps of:

performing an inbound message analysis,

performing a Service Decision including a database search in a common database pool,

performing an Outbound Message Synthesis using at least one Outbound Configuration Table.

9. SS7 signaling server for routing SS7 links, including a signaling transfer point, and a signaling application server,

wherein the STP has at least one external interface to connect the STP via at least one SS7 link to at least one telecommunications unit, and an internal interface to connect the STP to the SAS,

wherein the SAS comprises at least one processor, at least one database and at least one processing software for processing at least one application service request, wherein processing a SAS application service, comprises the steps of:

performing an inbound message analysis,

performing a Service Decision including a database search in a common database pool,

performing an Outbound Message Synthesis using at least one Outbound Configuration Table, and

wherein the STP is capable to process incoming SS7 messages, to identify a single application service request in one incoming SS7 message, to provide the identified single application service request to the SAS for further processing.

10. SAS Service Architecture having a layered structure including a set of software modules, at least: ASTP Dispatcher, SCCP Transcoder, at least one SCCP User Service Distributor, at least two SCCP User Services, wherein at least one type of interaction can be configured: interaction Type B2 between two SCCP User Services assigned to the same SCCP User Service Distributor, wherein the SCCP User Service Distributor forwards the message to be processed to a second SCCP User Service dependent on the result of the outbound message of a first SCCP User Service.